



In the United States Patent and Trademark Office

Applicant: John H. Collins et al.) Examiner: Joseph W. Drodge
Serial No.: 10/035,785) Group Art Unit: 1723
Date Filed: January 4, 2002) Paper No.

For: METHOD OF USING WATER SOLUBLE CATIONIC POLYMERS IN
MEMBRANE BIOLOGICAL REACTORS

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

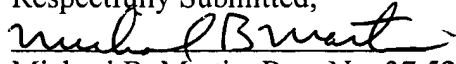
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Dear Sir:

In compliance with the duty under 37 C.F.R. § 1.56 to disclose references material to patentability, Applicants submit herewith Form PTO-1449 which lists patents, publications and other information for consideration by the Office. A copy of the references is enclosed.

This Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists.

This Information Disclosure Statement is being filed either (1) within three months of the filing date of a national application; (2) within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or (3) before the mailing date of a first Office Action on the merits or (4) before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114, whichever event occurs last. 37 C.F.R. § 1.97(b)(1-4). Accordingly, no fee is required. In the event that a fee is required, please charge any fee, or credit any overpayment to Deposit Account No. **14-0105**. A duplicate copy of this sheet is enclosed.

Respectfully Submitted,

Michael B. Martin, Reg. No. 37,521
Nalco Company
Patent and Licensing Department
1601 West Diehl Road
Naperville, IL 60563-1198

Date: 12/1/03

CERTIFICATE OF MAILING
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I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

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| Form PTO 1449 P U.S. Dept. of Commerce LIST OF REFERENCES CITED BY APPLICANT DEC 05 2003 | Attorney Docket No. : 7668 | Serial No. : 10/035,785 |
| | Applicant: John H. Collins et al. | |
| | Filing Date: January 4, 2002 | Group: 1723 |

U. S. PATENTS DOCUMENTS

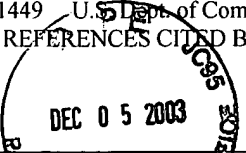
| Exam. Init. | | Document No. | Date | Name | Class | Sub-Class | Filing date |
|----------------|----|--------------|----------|---------------------|-------|-----------|-------------|
| | AA | 5,266,203 | 11/30/93 | Mukhopadhyay et al. | | | |
| | AB | 6,416,668 | 7/9/02 | Al-Samadi | | | |
| | AC | | | | | | |
| | AD | | | | | | |
| | AE | | | | | | |
| | AF | | | | | | |
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FOREIGN PATENT DOCUMENTS

| Exam. Init. | | Document No. | Date | Country | Class | Sub-Class | Filing date |
|----------------|----|--------------|---------|---------|-------|-----------|-------------|
| | AL | EP 888810 | 99/1/7 | EPO | | | |
| | AM | JP 63091196 | 88/4/21 | Japan | | | |
| | AN | JP 3004996 | 91/1/10 | Japan | | | |
| | AO | JP 4004098 | 92/1/8 | Japan | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | | |
|----------|----|-----------------|--|
| | AP | | Bergman, R.A., Joffe, D., Adams, N., Porter, R., "Gwinnett County Water Reclamation with 50 mgd Ultrafiltration – Proof Testing and Design", American Water Works Association, Membrane Technology Conference, pp. 1-13, 2003 |
| | AQ | | "Design Considerations for Small Drinking Water Membrane Systems", Pall Corporation, www.pall.com/water_8155.asp , pp. 1-5 |
| | AR | | "Indirect Potable Water Reuse, San Diego Water Purification Project", www.cmhc-schl.gc.ca/en/imquaf/himu/wacon/wacon_016.cfm , pp. 1-3 |
| | AS | | Lainé, J.M., Campos, C., Baudin, I., Janex, M.L., "Understanding Membrane Fouling: A Review of Over a Decade of Research, Ondeo Services – CIRSEE. Email: jean-michel.laine@ondeo.com , pp. 351-361 |
| | AT | | "Chemical Pretreatment For RO and NF", Technical Application Bulletin No. 111, Revision A, HYDRANAUTICS A Nitto Denko Corporation, www.membranes.com , pp. 1-15, March 22, 2002 |
| Examiner | | Date Considered | |

| | | |
|---|-----------------------------------|-------------------------|
| Form PTO 1449 U.S. Dept. of Commerce LIST OF REFERENCES CITED BY APPLICANT  | Attorney Docket No. : 7668 | Serial No. : 10/035,785 |
| | Applicant: John H. Collins et al. | |
| | Filing Date: January 4, 2002 | Group: 1723 |

U. S. PATENTS DOCUMENTS

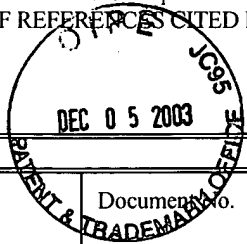
| Exam. Init. | | Document No. | Date | Name | Class | Sub-Class | Filing date |
|----------------|----|--------------|------|------|-------|-----------|-------------|
| | BA | | | | | | |
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| | BK | | | | | | |

FOREIGN PATENT DOCUMENTS

| Exam. Init. | | Document No. | Date | Country | Class | Sub-Class | Filing date |
|----------------|----|--------------|----------|---------|-------|-----------|-------------|
| | BL | JP 5345195 | 93/12/27 | Japan | | | |
| | BM | JP 7232192 | 95/9/5 | Japan | | | |
| | BN | | | | | | |
| | BO | | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | | |
|----------|----|-----------------|---|
| | BP | | "HYDRACoRe CHLORINE TOLERANT SPIRAL WOUND Nanofiltration Color Removal Membrane Elements", Technical Application Bulletin No. 109, Revision B, HYDRANAUTICS A Nitto Denko Corporation, www.membranes.com , pp. 1-10, February 22, 2002 |
| | BQ | | "Death Taxes....and RO Membrane Fouling", GE Water Technologies, Water Technology 69, www.gewater.com/library/tp/701_Death_Taxes.jsp , pp. 1-6, November 1995 |
| | BR | | Gould, C.K., Harrold, S.J., Weitnauer, A.K., "A Practical Approach to Controlling the Fouling of Ultrafiltration Membranes: A Case Study of the Successful Development of a Commercial Soy Protein Application", www.environmental-center.com/articles/article384/article384.htm , pp.1-14, April 1992 |
| | BS | | "Chemical Compatibility Desal Membrane Products – Membrane Types and Product Designations" |
| | BT | | Layson, A., "Microfiltration – Current Know-how and Future Directions", IMSTEC, Sydney, Australia, 2003 |
| Examiner | | Date Considered | |



U. S. PATENTS DOCUMENTS

| Exam. Init. | Document No. | Date | Name | Class | Sub-Class | Filing date |
|----------------|--------------|------|------|-------|-----------|-------------|
| | CA | | | | | |
| | CB | | | | | |
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FOREIGN PATENT DOCUMENTS

| Exam. Init. | Document No. | Date | Country | Class | Sub-Class | Filing date |
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| | CL | | | | | |
| | CM | | | | | |
| | CN | | | | | |
| | CO | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | | |
|----------|----|-----------------|---|
| | CP | | Roquebert, V., Cleveland, C., Leaf, D., "Identifying and Resolving Key Design Considerations for Integration of Low Pressure Membrane Filtration and Lime Softening Process", AWWA Membrane Technology Conference, Atlanta, Georgia, 2003 |
| | | | |
| | CQ | | |
| | | | |
| | CR | | |
| | | | |
| | CS | | |
| | | | |
| | CT | | |
| Examiner | | Date Considered | |